

## 01

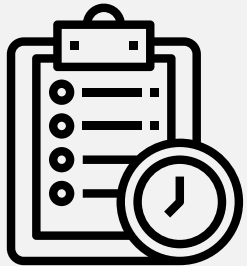
### PLANT ENGINEERING AND ITS TRADES

- 1.1 Requirements for the plant contractor and understanding one's own role
- 1.2 Fields of activity in plant engineering: new construction, modernization & expansion
- 1.3 Understanding and assuming EPC responsibility

## 02

### SPECIFIC FEATURES OF THE CONSTRUCTION AND INSTALLATION TRADES

- 2.1 Interdependencies and mutual influence of trades
- 2.2 Influencing factors in equipment installation
- 2.3 Piping construction as a key trade in plant engineering



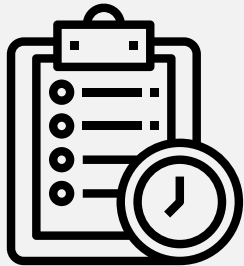
## 03

### CONSTRUCTION SITE MANAGEMENT DURING THE PREPARATORY PHASE

## 04

### BEST PRACTICE

- 3.1 Basics of planning
  - 3.2 Basics of scheduling
  - 3.3 The execution schedule and relevant boundary conditions as influencing factors
  - 3.4 Construction and installation concept and constructability analysis
  - 3.5 Key performance indicators (KPIs) as a planning tool
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- 4.1 Example 1: Which KPI(s) have the greatest impact on my project?
  - 4.2 Example 2: Identifying and evaluating the key driving KPI
  - 4.3 Example 3: Early planning of expected deviations

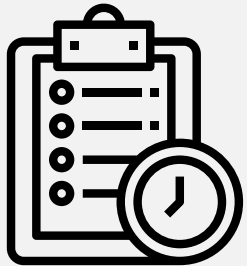


## 05 CONSTRUCTION AND INSTALLATION CONCEPT

- 5.1 Fundamentals of control
- 5.2 KPI systems as control tools
- 5.3 Resource estimation and resource deployment
- 5.4 Progress measurement
- 5.4 Critical path analysis

## 06 SITE ORGANISATION

- 6.1 Tasks and responsibilities within the site organization
- 6.2 Reporting – essential or bureaucracy?
- 6.3 Monitoring as the link between planning and control
- 6.4 Timely progress determination and trend analysis



07

## DEVIATION MANAGEMENT ON THE CONSTRUCTION SITE

- 7.1 Identification and detection of deviations
- 7.2 Interpretation and categorization of identified deviations
- 7.3 Decision-making processes and criteria
- 7.4 Initiation and implementation of corrective measures

08

## FLOWCHARTS, CASE STUDIES AND EXERCISES

- 8.1 *Work fronts and their significance*
- 8.2 *Parallelism of S-curves*
- 8.3 *Delays in welding activities*